R E P O R T R E S U M E S

ED 020 839 RC 002 513

OPERATION PEBBLE. SUMMARY REPORT.

BY- NORRED, ROBERT B.
TENNESSEE TECHNOLOGY UNIV., COOKEVILLE

PUB DATE 67

EDRS PRICE MF-$0.25 HC-$2.32 56P.

DESCRIPTORS- COUNSELING GOALS, CULTURAL ISOLATION, *CULTURALLY DISADVANTAGED, CULTURE CONTACT, *EDUCATIONAL DISADVANTAGEMENT, ECONOMICALLY DISADVANTAGED, *ENRICHMENT EXPERIENCE, EVALUATION METHODS, FOLK CULTURE, GROUP COUNSELING, INDIVIDUAL COUNSELING, LEISURE TIME, ORAL EXPRESSION, *PROGRAM EVALUATION, READING IMPROVEMENT, READING DIFFICULTY, RURAL ENVIRONMENT, *RURAL YOUTH, SOCIAL EXPERIENCE, UPPER CUMBERLAND REGION, OEO,

A COMPREHENSIVE EVALUATION OF OPERATION PEBBLE'S 3 YEAR SUMMER PROGRAM FOR ECONOMICALLY AND EDUCATIONALLY DEPRIVED CHILDREN OF THE UPPER CUMBERLAND REGION OF TENNESSEE IS PRESENTED. THE INTENT OF THE PROJECT WAS TO INVOLVE THE CHILDREN IN EXPERIENCES THAT MIGHT EXPAND THE HORIZONS OF THEIR STAGNANT, HIGHLY STRUCTURED CULTURAL ENVIRONMENT, WITHOUT DEMEANING THAT SAME ENVIRONMENT. COUNSELING TECHNIQUES UTILIZED IN THE PROGRAM ARE PRESENTED IN VIEW OF THEIR STATED OBJECTIVES AND THE CHARACTERISTICS OF THE PEBBLE STUDENTS. AN EVALUATION IS GIVEN OF THE INSTRUCTIONAL PROGRAM DEVISED BY THE PEBBLE STAFF TO MEET MEASURED AND APPARENT STUDENT DEFICIENCIES, ALONG WITH INSTRUCTIONAL ACTIVITIES USED FOR THE REMEDIATION OF THESE DEFICIENCIES. THE REPORT'S LAST SECTION DEALS WITH IMPLICATIONS AND RECOMMENDATIONS DERIVED FROM THE PEBBLE EXPERIENCE FOR THE PUBLIC SCHOOLS. (DK)

OPERATION PEBBLE

RECEIVED
JUL 9 1968
NMSU
E.R.I.C.

A Summary Report of a Three Year Project - 1967

". . . To toss into the stream of life
of these children
a succession of tiny pebbles
that would disturb the placid waters
of their limited environment."

Tennessee Technological University
College of Education
Cookeville, Tennessee

In contract
with the L. B. J. and C. Development Corporation
Monterey, Tennessee
Funded by the U. S. Office of Economic Opportunity

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

OPERATION PEBBLE

A Summary Report

TENNESSEE TECHNOLOGICAL UNIVERSITY

Cookeville, Tennessee

in contract with

The L. B. J. and C. Development Corporation

Monterey, Tennessee

and

Funded by the U. S. Office of Economic Opportunity

PREFACE

Tennessee Technological University recognizes that one of its primary responsibilities lies in providing the surrounding region with the fullest measure of cultural, economic, and physical services commensurate with the University's resources and manpower. The concepts and goals which led to the planning and implementation of Operation Pebble were evaluated as germane to this purpose and, therefore, received the full endorsement of the University.

The college of Education was asked to design and administer Operation Pebble. For many years the College had worked with the educational problems of disadvantaged rural children through local school systems, had made consistent efforts to create a climate for improved teaching through in-service training programs, and had been engaged in educational research. The College welcomed this opportunity to expand its services, to assist in the nation's efforts to defeat the blight of poverty, and to test certain hypotheses relative to the growth, development, and competencies of deprived youth in rural mountain areas.

Although the College of Education was charged with the primary responsibility for designing and administering Operation Pebble, many persons from other branches of the University--as well as persons from outside the educational profession--contributed significantly to the success of the program. University administrative officials gave their encouragement to all aspects of the project, and non-academic personnel ranging from the maintenance crews to cafeteria workers and campus police took on extra responsibilities cheerfully.

From the outset, it was expected that Operation Pebble could--and should--produce a significant body of new information that would assist other institutions in their efforts to design programs to improve educational opportunities for culturally deprived youth. More especially, the University hoped that the program would focus greater national attention upon the problems of deprived children in rural mountain areas and that this segment of American society--which had long been trapped in the eddies of isolation and neglect--would be encouraged on its own initiative to move confidently into the mainstream of American life and toward the solution of its own problems.

W. S. Prescott

W. S. Prescott, Dean of Faculties

Everett Derryberry

Everett Derryberry, President

L. B. J. & C. Development Corporation

gston • Byrdstown • Jamestown • Cookeville • Crossville

Community Action Agency *Economic Opportunity Act of 1964*

FFORD INGRAM
CUTIVE DIRECTOR

BOX 65 - PHONE 839-2234
MONTEREY, TENNESSEE

May 7, 1968

Mr. William Suttle, Regional Director
Office of Economic Opportunity
730 Peachtree Street, N.E.
Atlanta, Georgia 30308

Dear Sir:

We have discovered through this program and other programs designed for youth that poor mountain youth will respond to the right kind of stimulation. Stimulation that involves adventure, fun, self-enhancement and concern for the individual.

They respond at first with shyness, sometimes suspicion because of the newness of the experience, but eventually with enthusiasm and wholehearted participation.

This glimpse into a new dimension of living is carried back to the mountain home. Many, many parents have expressed appreciation for the influence this program and others have had upon the lives of their children. Much credit is due to Tennessee Technological University. The staff has been willing to work and experiment to help disadvantaged youth. Had it not been for the interest and enthusiasm of the staff this program would not have been possible and the ripples of change that flowed into some of the lives of the youth who spent three weeks on the campus would not have flowed.

Someway, somehow what we have learned, what we have accomplished, what we have discovered must be shared not only with parents but with teachers in this area. We are wrestling with the problem of how we can get funds and persons to share these discoveries.

Sincerely yours,

Clifford Ingram
Executive Director

1967 STAFF

Director: Robert G. Norred, Associate Professor of Health and Physical Education

Consultants

Everett Derryberry, President, Tennessee Technological University
Clifford Ingram, Director of L. B. J. & C. Development Corporation
Edell M. Hearn, Dean, College of Education, Tennessee Technological University
Marlin C. Hill, Assistant Professor of Education, Tennessee Technological University
Hoyle D. Lawson, Chairman, Department of Elementary Education, Tennessee Technological University
Charles J. Liner, Director of Housing, Tennessee Technological University
Lolah Mattson, College Nurse, Tennessee Technological University
Elizabeth S. Murphy, Dean of Women, Tennessee Technological University
Wallace S. Prescott, Dean of Faculties, Tennessee Technological University
Martin A. Peters, Dean of Student Services, Tennessee Technological University
Flavious J. Smith, Chairman, Department of Health and Physical Education Tennessee Technological University
Sherwell K. Tolleson, Chairman, Department of Educational Psychology and Guidance, Tennessee Technological University
James A. Wattenbarger, Chairman, Department of Music, Tennessee Technological University
Gary Kirby, Director of Food Services, Tennessee Technological University

Supervisory Staff

Robert G. Norred, Director
James Dotson, Supervisor, Counseling
Bette Fincher, Supervisor, Curriculum

Health Instructors

Peters, Lorraine D. ..... Sidney Guy Hatfield

Music Instructors

Stanton, Fowler G. ..... Wattenbarger, Mary

Physical Education Instructors

Inman, Conrad ..... Perry, Glenda Faye

Reading Instructors

Calvery, Carolyn
Ferrill, Joanna
Greenwood, Katherine
Jared, Collie B.

Social Intelligence Instructor

Cox, Ellen

Social Studies Instructors

McDaniel, Bettye
Simmons, Brenda

Counselors

Black, Tom M.
Brady, Mary Grace
Chambers, Novella L.
Dotson, James W.
Dudley, Eugenia P.
Garrison, Clara
Garrison, Tom
Hall, Roy David
Northern, George

Supportive Personnel

Evelyn Officer, Secretary, L. B. J. & C. Development Corporation
Carol Williams, Secretary, Operation Pebble
Robert J. Kisken, Assistant
Margie Houston, Office Assistant
Elaine P. Funk, R. N.
Rene Keathley, R. N.
Roy Leonard Clark, Assistant Counselor
Lois Garrison, Assistant Counselor
Terry Zapp, Accompanist
Larry Bruce Beaty, Life Guard
Elizabeth Anne Cooper, Life Guard
Woodrow Bryant, Physical Education Assistant
Phillis Boring, Teacher Aide
Linda Gray, Teacher Aide
Wanda Holder, Teacher Aide
Sandra Langford, Teacher Aide
Irene Sanders, Teacher Aide
Connie Sue Taylor, Teacher Aide

TABLE OF CONTENTS

	PAGE
INTRODUCTION	1
COUNSELING PROGRAM	8
Introduction	8
Counselor Objectives	9
Counseling Procedures	10
Characteristics of Pebble Students	12
Recommendations for Operation	27
INSTRUCTIONAL PROGRAM	33
Introduction	33
The Four-phase Instructional Program	34
Strengths of the Instructional Program	37
Most Noticeable Student Deficiencies	40
Instructional Activities for Remediation of Deficiencies	42
Implications for the Public Schools	46

INTRODUCTION

Program Conducted in the Summers of 1965, 1966, and 1967

The motivating force behind Operation Pebble was the desire to assist children from economically and culturally deprived homes in the Upper Cumberland Region of Tennessee to break the chain of poverty that frequently becomes an unending circle. The name of the project was derived from the idea that certain controlled experiences, when tossed into the life stream of the children's environment, would create ripples that would enable the youth to glimpse modern America and that would motivate them toward acquiring the skills necessary for full participation in American society.

The intent was to disturb--not obliterate--the placid waters of their limited environment. It was recognized from the outset that after the three weeks of their Pebble experience on the Tennessee Tech Campus, the children must return to the same home environments they had left just a few days before.

The Appalachian Region from which the students were drawn is severely handicapped by political, economic, social, and geographic isolation. Characteristically, a large percentage of the people live in isolation from the main stream of national existence. Stagnation, distorted values, hopelessness, superstition, and despair are passed from one generation to another. Potentialities are suppressed by fear and distrust of things outside their immediate communities. Life is often dominated by the struggle to survive, leaving little time, energy, or desire for learning or for participation in efforts to improve community or personal circumstances. The region has, however, many positive characteristics of which

it can be justly proud. The high values placed on tradition, independence of thought and action, and strong family ties, among others, provide a strong foundation upon which economic and social progress can be accomplished.

The character of Operation Pebble was based upon the assumption that disadvantaged youth from North Central Tennessee have the same basic needs as other youth. Because of restrictions imposed by their environments, however, it was anticipated that many of the children in the Pebble Program would be unable to identify realistic goals of optimum value to themselves, their communities, and their nation. It was deemed essential, therefore, that the youth be acquainted with the kinds of educational and cultural opportunities available which are necessary to their possessing the motivation and ability to achieve. The instructional and counseling programs were designed to give the youth a start toward acquiring the psychological, intellectual, and physical skills needed for the realization of desirable goals. The Appalachian culture, which had spawned the children, was never condemned; on the contrary, considerable effort was made to relate the better aspects of Appalachian culture with the more desirable characteristics of modern society.

One of the primary aims of the teachers and counselors was to aid each child in developing a more positive self-image. A vast body of sociological research has indicated that fear of failure and fear of the unknown are two factors that limit the aspirations and achievements of persons in the lower economic and social classes. To assist the youth in developing better self-images, to raise their aspirations within the bounds of their abilities, and to broaden their frames of reference, the teachers

and counselors employed personalized, individualized instruction to the maximum degree possible.

In pursuing the general objectives of the project, the following activities were emphasized: (1) academic, vocational, and personal counseling; (2) developmental and remedial reading instruction; (3) guidance in the development of certain values, skills, and attitudes related to an enlightened concern for one's physical, social, economic and political environment; (4) health knowledge, attitudes, and practices; and (5) aesthetic and recreational experiences.

Counseling

The counseling phase of the program consisted of exploring the aptitudes, achievements, personal and vocational interests, attitudes, values, and self-concepts of the participants. Counselors used both standardized tests and personal interviews in becoming acquainted with the problems of the children, and additional individualized evaluations were provided as needed. In addition to testing, efforts were also made to render assistance on personal and emotional problems through individual and group counseling services. Complete records were maintained and case studies were prepared for each participant. Most of the children had never before had an opportunity to consult with a professionally qualified counselor, for such services are not yet available in typical elementary and junior high schools in Tennessee.

Reading

The reading program was based upon the realization that most of

the youth had come from homes and schools where the availability and variety of reading materials is either very limited or non-existent. Many schools in the Appalachian Region have no libraries, others have poorly stocked facilities, and the availability of special reading instruction is the exception rather than the rule.

Emphasis was given to phonic skills--taught with modern audio equipment--and to comprehension, and speed. Children were given an opportunity to see, hear, speak, and compare sound units, and special instruction was given in dictionary usage. It was hoped that the new exposure to dictionaries and their potential value would aid the children in developing larger vocabularies and more adequate word usage. Students were given complete freedom in selecting books for pleasure reading from an extensive collection of books that had been assembled especially for Operation Pebble. At the end of the program each student was allowed to take home a dictionary and three books of his own choosing.

A further aspect of the reading program was its integration with the other instructional areas of the project. Many of the books available to the students, for example, had been selected because of their value to the social studies or to the health programs.

Social Studies

The social studies program gave primary attention to the task of motivating the students toward becoming responsible citizens by constructive participation in community, state, and national activities. Attempts were also made to inspire the students to seek additional knowledge and

understanding of humanity and to cause them to recognize their own powers and responsibilities in charting their future and the future of others. Indirectly, each student was encouraged to re-evaluate his set of individual values and to develop an appreciation for the rewards and opportunities for service to his fellow citizens.

The area from which the participants were recruited is plagued by an unusual number of health problems, including tuberculosis, malnutrition, parasites, dental deficiencies, and lack of personal cleanliness. Another major problem is the high incidence of ignorance of free public health services.

In an effort to meet some of these problems a physical examination by a medical doctor was required of all participants. They also received a dental cleaning and examination and emergency dental care by a professional dentist. Because the local public health facilities (Putnam County Public Health Department) were not adequately equipped and staffed to provide the required health services, it was necessary to contract with a physician and dentists to guarantee the availability of these services. The physician scheduled daily sick calls and twenty-four hour care for illnesses. In addition, two registered nurses were employed to provide twenty-four hour care during the entire program.

Health instruction centered around problems such as cleanliness, nutrition, community health and sanitation, safety education and first aid, and dental care. It was hoped that through the health emphasis the participants would develop more wholesome health habits and attitudes and that they would be able to realize happier and healthier futures.

Aesthetic and Recreational Experiences

The aesthetic and recreational experiences provided in the project were aimed toward making the program an enjoyable experience for the participants by the development of physical and musical skills. The program was so structured that every child could achieve some degree of success. Appreciation for discipline and rules was encouraged, and attention was focused upon how to make worthy use of leisure time.

Conclusions

By almost every measure that can be applied to Operation Pebble at this time, it would have to be considered a success. Comments by students and teachers, observed changes in behavior and attitudes, and analyses of test results give consistent evidence that the program made a favorable impact upon the students.

Furnishing each child with a limited wardrobe allowed some students to be as well-dressed as their fellow pupils for the first time in their lives--and to the age group that participated in the Pebble experience (12-15 years of age), having inadequate clothing is a psychologically disturbing experience.

The weekly allowance and the field trips were further highlights of the program for the students as these experiences were also new to many of them. The trip to Nashville to see the state government buildings, modern department stores, Centennial Park, the Parthenon, museums and the airport was an experience that had previously been denied a majority of the students.

These experiences and many more should have given the participants in the program a taste of modern America, and should also have helped the students to improve their self-images through having enlarged their experiences to the extent that they can acquire new status with their peers.

Perhaps the most important of all the aspects of the program was the fact that each child was accepted by the entire staff as a worthwhile human being. No attempt was made to mold the children into a particular pattern, but the atmosphere of interest and acceptance, as shown by the staff, was intended to assist each child in discovering his assets and his positive features.

Those who worked in Operation Pebble are unanimous in their conclusion that for many children who participated in the project and for their future families, the chain that binds them to economic and cultural poverty has been vastly weakened.

In the sections which follow, more specific attention is given to the counseling and instructional phases of Operation Pebble.

THE COUNSELING PROGRAM

Introduction

The general objectives of the Counseling Program for the three sessions of Operation Pebble were essentially the same with only slight modifications. A statement of these objectives may be found in Operation Pebble: A Second Year Report. With a smaller number of students in Operation Pebble III, it was felt that there could be greater identity on the part of students with the total program and staff. Some activities were designed with this in mind.

The major consideration of the Counseling Program of Operation Pebble was to the provision of supportive counselors with whom each student could relate and the organization of small groups in which each student could find a place where he could fill an effective operational role as well as gain personal acceptance.

Small groups of twelve or thirteen students, grouped by sex in random fashion, were established with certified counselors assigned to each. These counselors lived in the dormitories with the students, assuming full-time responsibility for them. Assistant counselors were employed to provide supplementary services as well as to allow each counselor two days off during each three weeks session. A head counselor was appointed to insure that effective communication was available at all times. A counselor supervisor provided general coordination and direction.

Each counselor was provided a room for group counseling sessions with his group. Formal counselor group sessions were attended daily

in which the counselors shared ideas and experiences with each other, with the counselor supervisor, and with consultative personnel.

Counselor Objectives

The counselors felt that the most important counselor objectives related to establishing a climate in which each youngster would feel not only the security of counselor and group acceptance but also that his contribution to the group was desired and respected. This aspect of the counselor's role involved:

1. Developing a relationship with each student that was characterized by mutual understanding and acceptance as a worthwhile human being.

2. Helping students develop confidence in Pebble, its program, and its staff.

3. Aiding students in seeing the advantages of working in harmony with others in groups.

4. Providing encouragement and support to the individuals needing more self-confidence in their intellectual, physical, and social abilities.

Another major concern of the counselor, and closely related to that of building a feeling of acceptance, related to aiding the student in affecting the personal changes necessary to his becoming a more effective individual and group member. This goal involved:

1. Supporting the various phases of the instructional program with special emphasis on self-development and attitudinal change.

2. Providing supplementary instruction in personal hygiene,

grooming, poise, and manners in order to bolster self-confidence by aiding in improving personal appearance.

3. Aiding students in gaining a new perception of self as important and significant with opportunities for success.

4. Encouraging and assisting in the exploration of self-attitudes, values, aspirations, and other aspects of self and society.

5. Aiding in relating personal interests and aptitudes to educational and vocational pursuits and acquainting students with specific training opportunities and available financial resources.

A final objective related to the securing and use of information relative to participants in Operation Pebble. This included:

1. Securing, through testing and observational procedures, information helpful in counseling and teaching.

2. Maintaining records on each individual and writing individual reports on each student at the conclusion of the program.

3. Submitting recommendations for each student which might be of value to this school or other agency concerned with his welfare.

Counseling Procedures

These objectives provided directioning for the program of counseling services provided to "Pebble" students. Both counselors and counselor supervisors felt that objectives were met in a very acceptable manner. The objectives determined the procedures and techniques employed. Some of these procedures are briefly outlined below.

1. Adjustment techniques

a. Warm, accepting personalities characterized the counselor staff.

b. Students were immediately assigned a counselor, room, roommate, and counselor group, an action that immediately offered assurance.

c. Many group activities were organized such as softball teams and singing groups to build feeling of oneness and group cohesion.

d. Instruction was provided to whole counselor groups and matched groups of the opposite sex to ensure group spirit.

e. Clothing was provided all Pebble students so that differences in manner of dress would be no factor in social adjustment.

f. There were no written rules and regulations which students were required to obey.

g. The entire counseling, instruction, and administrative staff was support oriented.

h. Individual involvement was major approach of the program.

2. Informational techniques

a. Group counseling sessions provided major means of imparting and securing information and reactions from students.

b. Individual conferences enabled counselors to know each counselee in considerable depth.

c. Various standardized instruments were used to secure data

regarding interests, reading achievement, intelligence, social class, and psychological adjustment.

d. Informal instruments were used to obtain and record information about social development, attitudes, and environmental factors.

3. Instructional techniques

a. The guidance oriented staff emphasized the humanistic approach in all instruction.

b. Student involvement in the learning process characterized the major teaching method. All points of view were considered.

c. Much teaching focused on real problems and true concerns of the age group and of the region.

d. There was no competition and grading, and marking was not mentioned.

e. Much of the instruction was based on building skills.

f. The focus was on utility with students involved in practical, useful types of operations.

Characteristics of Pebble Students

Discussions with counselors and teachers revealed many subjective judgments which support data obtained from evaluative instruments used during the Operation Pebble program. Generally, the staff described the major deficiencies of "Pebbles" as being:

1. lack of awareness
2. lack of skill and knowledge

3. lack of confidence and personal security

4. lack of encouragement

It is significant that all these differences are in areas usually identified among the instructional and educational objectives of the public school. It appears that many of the schools from which Pebble children came either were unsuccessful in accomplishing these objectives or did not truly accept them as appropriate guides to teaching and learning. The following statements of characteristics of students during the three years of Operation Pebble are not all inclusive and to a considerable extent represent the subjective judgments of trained counselors and teachers, however, they are designed to aid teachers, counselors, and administrators in finding direction in their planning programs for the disadvantaged junior high school aged student.

1. Pebble students departed from normalcy in certain aspects of physical size and physical fitness.

Although data shows little deviation from normality in height for Pebble students, it was determined that, on the average, both boys and girls were below the weight expected for students of their age group.

Data from Operation Pebble II indicated that Pebble youngsters were below the 50th percentile on national norms in most areas of physical fitness.

2. Pebble students had a fear of the unknown.

Fears are very difficult to document, however, this was a characteristic assigned by counselors and teachers to students in all Pebble sessions. This was not interpreted as the natural, ill-at-ease

feeling accompanying a new experience, but that fear grounded in insecurity and manifesting itself in an unwillingness to attempt new and uncertain directions or to assume leadership responsibilities. Psychologists agree that reluctance to try new things, to adopt new behaviors, provides a major impediment to intellectual, physical, and social development. It was felt by some counselors that many "Pebbles" who dropped out early in the program left, not because of homesickness, but because of fear of the uncertain demands which they anticipated would be made of them.

3. Pebble students had negative attitudes toward school and teachers.

Reflected throughout the three Pebble years were unfavorable attitudes toward school and teachers. Members of the staff who were most effective in relating to students indicated that the students did not identify them as "teachers." These negative attitudes may have been the result of the failure of Pebble students to achieve academically at a high level or were perhaps a product of an environment which places little importance on schools and education. These negative attitudes were reflected in class activities. Few students participated in discussions, accepted responsibility, or assumed leadership. Listlessness and apathy were evidenced toward learning tasks, even those including current events and local concerns.

Of 38 girls of Operation Pebble III who responded to a Sentence Completion Form in such a way as to reflect an attitude toward school, 36.84 per cent responded negatively. For boys, however, 77.50 per cent of the respondants expressed negative feelings.

It might also be noted that school was seen by students as being their major source of problems. Averages for the three years of Operation Pebble for the Mooney Problem Check List, Form JM, clearly show that school is indicated as the area in which most of the problems occur. This is further born out by responses of students of Operation Pebble III to "My Greatest Worry..." on a Sentence Completion Form. Of the 28 boys responding, 14 or 50 per cent identified school as being the major source of worry, while 37 per cent of the 24 girls selected the school as the major source of worry, making it second only to the opposite sex.

4. Counselors and teachers characterized Pebble students as having low levels of expectation and aspiration. Some teachers reported that on informal surveys regarding plans for the future, responses of girls centered around marriage and those of boys related to occupations offering minimal opportunities for progress and requiring little preparation. High school completion and college attendance were seldom included in these plans.

Low levels of aspiration are in line with data provided in this report relative to knowledge of available vocational opportunities and to the self concepts of Pebble students. Students who perceive themselves as inadequate would not be expected to project future plans requiring superior or even adequate performance as compared to that of his reference group.

5. Pebble students were home and family oriented.

Rural children characteristically find their primary needs met through the family. Having few neighbors in close proximity forces children to seek social satisfaction in the home. Students at Pebble

frequently expressed concern for the health and welfare of their parents. Most of the students who left Pebble early gave a desire to be with parents again as the reason. Whether this represented a true homesickness or an acceptable excuse for fear of the unknown elements in Operation Pebble is impossible to determine.

It would appear that there is a true affectional base to the family orientation. A sentence completion item "The Greatest Person I Know..." yielded, for both sexes, the parents' names a greater number of times than any other response. This is further supported by responses on a Sentence Completion Form of Pebble III students which show attitudes relative to certain areas of family life to be largely positive. Of students expressing attitudes, 91.89 per cent of the girls and 92.59 per cent of the boys expressed positive attitudes toward their mothers and fathers. Attitudes were also highly positive toward home, friends, and neighbors.

6. Pebble students showed little hostility, resentment, or belligerancy.

Numerous books and articles about the culturally disadvantaged list hostility and resentment as characteristics of the children. Throughout the three years of Pebble, members of the staff expressed amazement at the absence of hostile attitudes on the part of students toward the leadership or toward people generally, even toward those of other social classes. Negro students were somewhat more reserved and somewhat suspicious of the motives of others but revealed no feelings of dislike or hostility. Students from areas where no Negroes live

showed no hostile racial attitudes. Few students used "sir" when addressing male adults but this was interpreted as a learned response rather than evidence of disrespect or hostility.

7. Pebble students were slow to identify with adults.

This does not suggest that Pebble students did not recognize the authority of the leadership of Operation Pebble. Counselors were unanimous in their feeling that students did recognize authority and even placed much responsibility on leaders who preferred a more democratic group operation. This recognition of authority was probably a factor standing in the way of proper identification with adults. The students were described as being shy and timid by some, and were described by others as being afraid. The practical effect was the same. Pebble students had difficulty communicating with adults in a meaningful relationship. They appeared to be suspicious of adult motives, having difficulty accepting the objectives of the counselors and teachers as being individual centered and focused on their personal development.

8. Pebble students had poor achievement histories.

Data from each session of Operation Pebble has indicated that there is a discrepancy between the grades which the students had attended and those which were appropriate to their age levels. This difference indicates that the Pebble students had failed one year in school on the average during the elementary and junior high years.

Subjective data from teachers substantiate the achievement problems of Pebble students. Specific attention to academic deficiencies is given in other portions of this report. Reading scores of students

upon the beginning of the combined Pebble sessions provide evidence of the lack of achievement in reading of the Pebble students in the programs which they had attended. In the important areas of vocabulary and comprehension, students were retarded by a year in progress.

Students of Operation Pebble I and II were administered the Lorge Thorndike Test, Non-Verbal Battery, Level 4 (for Grades 7, 8, 9), Form A. The results were a mean IQ of 92.29 and a mean standard deviation of 13.89. This IQ compares with reports of the Technical Manual (p. 6) that at age 14, individuals from "low" level socio-economic communities average 95.9 on the Non-Verbal tests and those from "low-low" level socio-economic communities average 85.8. The standard deviation of 13.85 is less than that of 16 for the norming population on the Lorge Thorndike Intelligence Tests. This indicates that the range within which the middle 68 per cent of the scores fall for Pebble students, 78-106, is not only substantially lower than the 84-116 range which encloses 68 per cent of the norming population but also produces less variation in performance than is found in the total population.

To the extent that the IQ represents learned responses, the Pebble students had not achieved to the expected level. To the extent that IQ is a determinant of achievement, the expected performance of the "Pebbles" is influenced negatively.

9. Pebble students were very dependent for direction and support.

Throughout the entire Pebble programs, counselors viewed as a major problem the dependence of Pebble students on others for guidance and support. This was frequently expressed in efforts to secure approval

or unwillingness to take action without specific instructions from the adult leadership. Counselors felt this dependence to be the result of a number of factors.

a. Teachers frequently behave in highly dictatorial fashions in the classroom. This tendency to over-direct discourages responsibility and independence.

b. Students from rural areas have few adults with whom they can identify. Achievement problems present difficulties in the students' identification with teachers.

c. Parents of many Pebble students have not encouraged them to participate in decision making situations. Family discipline is lodged entirely in the hands of the adult members.

d. Data included elsewhere in the report indicate that Pebble students are characterized by low self concepts. Students who perceive themselves as inadequate with few opportunities for success are reluctant to leave the comparative safety of being hidden among the mass of dependents. It is also important that there be frequent support for those minor contributions that the student can safely make.

10. Pebble students were lacking in numerous learning and social skills and devoid of much common knowledge and understanding.

Specific learning problems are identified in other sections of this report. It may be said, however, that Pebble students were deficient in many areas important to effective school operation and social functioning.

a. For three sessions of Operation Pebble, the average grade level was 7.87. Scores available represent below average performance of more than one year in the important categories of vocabulary and comprehension for Pebble students.

b. Teachers have indicated that students were deficient in writing, listening, and writing skills. Their attention spans were short and they had difficulty understanding and following instructions.

c. Pebble students were deficient in their speech habits. Their linguistic development was retarded.

d. Pebbles had few social skills. Many habits of common courtesy had not been mastered. More important than social skills was the absence of group feeling. This made it difficult to develop esprit de corp among the counselor groups. It would have a similar effect upon the teachers' attempts to develop a feeling of oneness in a classroom.

e. Pebble students had little knowledge of proper grooming and dress. At the age of the Pebble students, this knowledge of appropriate standards of dress and grooming is essential for social acceptability.

f. Pebbles were deficient in knowledge of common recreational skills. Games usually familiar to junior high age students were unknown. Students had few skills in effective use of leisure time. Doing nothing seemed the most common way to spend leisure.

g. Responses of students of Operation Pebble I to a Health

Misconception Test indicated a great number of students subscribed to many incorrect conceptions. Some of these misconceptions were of the sort to result in some danger to the student or make him vulnerable to dishonest salesmen.

11. Pebble students had little awareness of vocational opportunities, no realistic knowledge of occupational requirements, and few sound vocational goals and interests.

Pebble students had little information about the opportunities available for increased education and for vocational preparation. Any reference to employment was simply "getting a job" rather than planning for specific positions. Many Pebbles learned job titles during the program but had difficulty understanding demands or opportunities associated with particular positions.

The Occupational Interest Inventory, Intermediate, 1956 Revision, published by California Test Bureau, was administered to Pebble III students. According to the Manual, Major Fields are identified by scores above the 70th percentile and Rejected Fields are identified by scores below the 30th percentile. It is significant that in few areas did the students score at the levels indicating either a Major Field or Minor Field. This may reflect either a low level of interest or insufficient experience and information for Pebbles to accurately differentiate between interests. Coupled with subjective information from counselors and teachers, it seems to indicate considerable uncertainty regarding interest areas.

Counselors characterized "Pebbles" as being unable to delay

gratification of immediate needs for what the future might produce. This probably resulted from a future which is very unclear.

Associated closely with interests are attitudes toward specific and general work activities. The Sentence Completion Form revealed 75 per cent of the girls' responses and 70 per cent of the boys' responses of Pebble III students to be negative with regard to work. This attitude discourages any long range planning to enter the world of work and suggests that an intensive effort to develop both an awareness of vocational opportunities and an education as to the desirability of involvement in the nation's work force must be a part of any effective educational program.

12. Pebble students were characterized by feelings of inadequacy and inferiority.

Students reflected low self esteem on a number of devices aimed at investigating aspects of the self concept. Pebble III students reacted on the Sentence Completion Form to the category "I can't..." in a manner indicating that personal limitations presented a major area of concern.

Donna Barton investigated the perceived personality needs of students in Operation Pebble II through use of the Stern Activities Index, an instrument which considers thirty personality needs which combine to form twelve personality factors. Students are examined in terms of how their responses to various items reflects the personality factors. Mrs. Barton concluded from her study that:

a. disadvantaged males of junior high school age were characterized by the following need factors.

1) Dominance over females, children, and inferiors.
2) Action-orientation, with open aggression a major response to frustration.
3) Desire for power through socio-political recognition.
4) Desire for isolation, with an avoidance of social situations.
5) Disinterest in the opposite sex.
6) Ability to withstand pain or injury without complaint.[1]

b. disadvantaged females indicated the following significant factors:

1) Need for nurturance, with enjoyment in caring for the sick and for children.
2) Submission to male dominance and authority figures in general.
3) Interest in social activities and friends.
4) Interest in the opposite sex, in getting married, and in having a family.
5) Lack of interest in educational matters.[2]

c. the total group was characterized by the following additional needs:

1) A poor self concept and an underdeveloped ego structure.
2) Emotional constraint and lack of expression.
3) Inhibited and rigid responses.
4) General lack of interest in education and related areas.[3]

Using data acquired from students in Operation Pebble II, Sammie Mitchell found support for the conclusions of Mrs. Barton. The Tennessee Self Concept Scale, The Clinical and Research Form, 1965, by William H. Fitts, was administered to the students at the beginning and end of each

---

[1]Donna Rogers Barton, "An Analysis of the Perceived Personality Needs of Selected Students Participating in a Program for Junior High School Aged Rural Mountain Youth." (unpublished Master's thesis, Tennessee Technological University, Cookeville, 1967), pp. 44-46.

[2]Ibid.

[3]Ibid.

session of the program. This instrument is designed to give information regarding certain aspects of self concept, such as attitudes toward the physical self, family self, moral self, and others.

Mrs. Mitchell concluded that:

> 1) ...the youth, both males and females, were defensive and were unable to accept self-criticism.
> 2) ...the subjects were doubtful of their own worth and had little confidence in themselves and their abilities. They saw themselves as being undesirable, and they tended to be anxious and depressed.
> 3) ...the subjects saw themselves as undesirable, doubtful of their own worth and inadequate in social interactions with other people.[4]

Supporting Mrs. Mitchell's conclusions are results of the use of The Tennessee Self Concept Scale, Counseling Form, 1965, with Operation Pebble III students. In all areas, with the exception of the variability area, the scores were below the 50th percentile. The significance of this will be noted in the brief interpretations which follow.

a. Self Criticism Score (SC)-High scores on this scale indicate a normal, healthy openness and capacity for self criticism. Low scores indicate defensiveness. Pebble children scored slightly below the 50th percentile.

b. Total Positive Scores (P)-This reflects the level of self esteem. Persons with high scores tend to like themselves, feel that they are persons of value and worth, and have low confidence in themselves. People with low scores are doubtful about their own worth; see themselves as undesirable; often feel anxious,

---

[4]Sammie Garrett Mitchell, "A Study of Certain Aspects of Self Concept of Selected Disadvantaged Rural Mountain Youth." (unpublished Master's thesis, Tennessee Technological University, Cookeville, 1967), pp. 31-33.

depressed, and unhappy. Pebble students scored below the 30th percentile in total positive and in each row and column.

c. Row 1 P Score-Identity--Here the individual is describing what he is as he sees himself.

d. Row 2 P Score-Self Satisfaction--Here the individual describes how he feels about the self he perceives.

e. Row 3 P Score-Behavior--This score measures the individual's perception of his own behavior. For Pebble students this is the low area.

f. Column A-Physical Self--Here the individual is presenting his view of his body, his state of health, physical appearance, skills, and sexuality.

g. Column B-Moral-Ethical Self--This indicates moral worth, relationship to God, and feelings of being a "good" or "bad" person.

h. Column C-Personal Self--This score reflects the individual's feeling of adequacy as a person.

i. Column D-Family Self--This reflects one's feelings of adequacy, worth, and value as a family member.

j. Column E-Social Self--This reflects the person's sense of adequacy in his social interaction.

k. Total Variability Score--This score indicates the amount of inconsistency from one area of self perception to another. High scores mean that the scores are so variable as to reflect little unity or integration. Well integrated people generally score below the mean. Pebble students scored considerably above the mean.

l. Column Total V--This summarizes variation among the selfs in the five columns.

m. Row Total V--This summarizes variation among the identity, self satisfaction, and behavior rows.

n. The Distribution Score (D)--This reflects certainty about how the individual sees himself. High scores indicate that the subject is very definite and certain in what he says about himself. Pebble students scored slightly below the mean.

An examination of the scores of Pebble students indicate generally low self perception in all areas examined. Significant positive correlations existed between all areas of the Self Concept Scale with the exception of the Self Criticism Scale and the Variability Scales, indicating the general nature of the feeling of inadequacy. The significant relationship between the category of Distribution and all areas of self concept except self criticism indicates that those with lowest self concept are less definite in what they say about themselves.

Intercorrelations for the Pebble III data indicates negative relationships between areas of The Tennessee Self Concept Scale with the exception of the Self Criticism and Variability Scales and categories of the Mooney Problem Check List, with the exception of the Mooney category of Health and Physical Development for which no significant relationships were found, even within other areas of the Mooney. Negative relationships significant at the .05 level were found in 49 of the 63 possible combinations on the two measures.

13. Pebble students responded in positive ways to the introduction of ideas under an atmosphere of acceptance and support.

Teachers and counselors marveled at the enthusiasm that Pebble students evidenced toward the acquisition of new skills and the excitement shown at the accumulation of learning materials to take home. Problems lay not in lack of concern for new skills but in the fear of failure and rejection which discouraged initial efforts. Not until students realized that they were accepted as important group members, that the energies of all were focused on their progress, and that experiences would be provided in meaningful quality and manageable form, did this true enthusiasm for learning become apparent.

Recommendations for Operation

From work with Operation Pebble for three years, counselors and teachers have made suggestions which they felt should contribute to the more effective development of students. These are not complete, obviously, and should be supplemented by other research and study being conducted.

1. Teachers must stop projecting failure for the disadvantaged. Low performance expectations produce low performance and we often use test and other tools to reinforce these expectations.

2. Those working with disadvantaged must treat them as individuals and not as a group. Individual differences in every conceivable area exist among the disadvantaged as with the total population.

3. Learning can take place only when the attention of the

disadvantaged is attained and sustained. Efforts should be made to catch and hold this interest through examining the value of content, appropriateness of vocabulary, and providing freedom from conflict producing elements.

4. The male need for leadership and ego-enhancement should be met by the provision of opportunities for success experiences through positions of leadership. Some students in Pebble gained prestige by learning to operate audio visual equipment.

5. The perceived need of females for social activities and helping others should be utilized as a basis for programs designed to foster an interest in academic pursuits.

6. Supportive counseling should be provided to encourage students to reveal feelings and attitudes. Class organization should center around free discussion approach. This will encourage participation and affect speech habits.

7. Coordinate school services with other county and community agencies to insure dental and medical care, mental health provisions, glasses for those unable to afford them, and a variety of other student needs. Some of the problems of students are not school related but are of school concern.

8. Junior high schools should modify their curricular offerings to provide experiences in areas of identified need.

   a. Home economics teachers should be utilized to provide instruction relative to dress and social behavior. Boy-girl relationships could be explored. An alternate to this is a well-organized homeroom program.

b. Physical education programs should be organized for elementary and junior high schools. The alternative to this is for the county to plan a program of physical activity which provides for the sequential development of skills and increased knowledge of common play activities.

c. Offerings of an exploratory nature should be a regular part of the curriculum. Only through broad experiences can evaluation of self and interests be made.

d. A practical approach should be emphasized in teaching. Additional work with crafts and arts is desirable. Field trips, visual materials, role playing should be a part of the program rather than to be oriented toward a text which students cannot understand.

e. Reading specialists are needed in the system to insure that teachers are able to provide remedial instruction in this important area.

9. Teachers and counselors should be aware of the characteristic shyness and restraint of the students. Emphasis should be placed on the human relations aspect of the program. Small groups should be utilized in class and counseling program to build social skills and attitudes.

10. Self concepts are brought from home and to a considerable extent have their origin and reinforcement there. There must be a focus on the home, with the school and home combining efforts to give encouragement and support of feelings of worth and self respect. If a student believes statements by his counselor that he is something other than

what his parents say, he must disbelieve his parents. If the relationship is important, he won't. The parent must be utilized in the program of building self esteem. Family criticism is a poor approach.

11. Opportunities should be provided for free reading opportunities with books of high interest, low vocabulary.

12. A variety of instruments as psychological measures, indicators of interests and problems, and informal indicators should be available and used by qualified people.

13. Counselors should focus on goal establishment. Teachers should also emphasize the establishment of objectives with emphasis on the development of attitudes, interests, and skills.

14. Teachers should de-emphasize testing and grading of the disadvantaged. Tests provide reinforcement of attitudes of inadequacy and inability. Evaluation should focus on growth and discovery of assets rather than limitations. Research regarding the negative effects of failure on the self concept should be examined.

15. Programs should be developed which will offset the image of "hick" that many articles and television programs project.

16. A program of clubs should be established to encourage the development and continuance of leisure time and avocational activities.

17. Wide cultural exposure should be provided with identification with success models to inspire and aid in developing positive self concept. Living examples of the power to overcome obstacles can provide a boost to motivation.

18. Programs should be provided to make available information

about vocational and educational opportunities and engaging their parents in promoting motivation for occupational success.

19. Teachers should have a broad understanding of the cultural and social class background of the students. She should speak the child's language, understand his special problems, and know his particular needs.

20. A humanistic approach to teaching and learning should be established. This approach involves trust and respect for the students and their opinions and invididuality. As the disadvantaged have had little contact with the new role of teacher as moderator or guider of student activities, a highly supportive and accepting atmosphere is demanded. The teacher should be projected as a person of whom you ask questions and receive answers rather than an adult with whom you communicate as seldom as possible. She must be less tense, more comfortable and less emotionally involved.

21. Not only should opportunities be provided to provide encouragement, offer praise, and give success experiences, but also the teacher should avoid reinforcing negative feelings of self worth, achievement, and behavior.

22. Guidance committees and curriculum study groups should be established in larger schools and among groups of smaller schools to ensure careful planning and implementation.

23. Counselors should be provided in all schools at all levels. In small schools where this is impractical, guidance oriented teachers should be selected and given released time to work with students and coordinate group guidance programs.

24. Students need to be convinced that important people care for them individually and collectively. Teachers, parents, counselors, and administrators must reflect this attitude of caring.

25. Inservice programs should be provided in all counties of the Upper Cumberland area to focus on education of the disadvantaged.

26. All county, state, and federal sources should be examined to determine any available sources of funds for special programs for the disadvantaged.

27. Programs for building the self concept should be initiated in all junior high schools and extended downward into the elementary schools. This would necessarily involve all elements of the community.

28. Teachers should examine their own attitudes toward disadvantaged students and low achievers. A major difficulty in working with the disadvantaged is removing the biases which make it difficult to see them as individuals with unique abilities and limitations.

INSTRUCTIONAL PROGRAM

Introduction

Four phases of instruction were provided for the students participating in Operation Pebble. A three-year evaluation of this unique program for culturally deprived youngsters indicated the success of the four-phase instructional plan.

Reading and social studies instruction were provided each morning for every boy and girl. During the afternoon each student participated in physical education, including recreational games, sports and swimming; and during another part of the afternoon each student participated in health instruction and music activities.

The anticipated needs of these students served as guiding principles in planning the original 1965 Operation Pebble. Through a continuous program of examination and evaluation of activities and techniques, plans were modified to more nearly insure the movement of each student toward a more productive fulfilling part in American life.

The details for each area of Operation Pebble's instructional program have been published in previous reports. Specific plans were reported in Operation Pebble: A Second Year Project. The instructional program accepted the same general and specific objectives for the total program; quite naturally, teaching techniques and pupil activities varied to some extent from year to year and group to group.

The staff of Operation Pebble found many strengths in the instructional program as organized and administered. This report will

attempt to point out the most outstanding of these strengths, especially those which have implications for our school systems.

As an additional task, the staff endeavored to identify specific needs of the culturally deprived, early adolescent of the five-county area served by our funding agency, L. B. J. & C. Development Corporation. It is hoped that these findings may be useful to others who plan and administer programs for these youngsters.

The Four-phase Instructional Program

Instruction for the boys and girls of Operation Pebble was arranged during the morning and afternoon. To draw attention to the distinct nature of the class periods of Operation Pebble, the term "phase" of instruction shall be used in describing each part of the classroom day. Each day contained four phases of learning periods. The structure of each phase was carefully planned to include situations in which teacher-directed portions alternated with student-directed portions; each phase also included quiet, study-type situations alternated with participatory, active situations.

Each student participated in instructional activities for a total of seven hours daily. Each phase of the instruction was carefully designed to further these purposes:

1. helping the students acquire a more adequate self image.
2. enhancing the educational concepts of students.
3. developing within the students an increased appreciation for the American heritage.

4. motivating the students toward higher standards and responsibilities in both personal and community living.

The seven hours of daily instruction were divided into four phases of 105 minutes each. Three of the four phases of instruction offered daily were reading, social studies and physical education. On alternating days music and health were offered as the fourth phase.

For reading instruction students were grouped by an informal, teacher-conducted evaluation. On the first evening of the session each counselor's group participated in a session of Bingo. One adult conducted the game while another, who was trained in the evaluation of children's reading ability, worked individually for a few minutes with each student in the group. At this time the student was presented a selection of cards with reading matter of varying difficulty. SRA Reading Lab Rate Builder cards were used. The student was asked to examine the cards and to choose one of them to read. Questions concerning each card's content were then discussed with the student. On the basis of the findings of these individual readings, class groups were formed for students with similar reading levels.

The scope of the reading phase of instruction included activities for developing all communication skills, both oral and written along with the interpretive. The content covered included that which was most meaningful to the students: the various activities and experiences occurring during the session in Operation Pebble. A multi-media approach was used to build specific reading skills as individual need was discovered. Specific objectives and teaching techniques for the four

phases are included in Operation Pebble: A Second Year Report.

A variety of experiences were provided within the social studies phase of Operation Pebble. Within the classroom the boys and girls used various visual aids for acquisition of factual background and expansion of knowledge in areas which were best approached vicariously. Several field trips were used to expand first-hand learnings. The experience of all field trips formed the basis for communication skill development within the reading phase. A part of each day's social studies class session was spent in developing selected skills necessary for study: graph reading, map interpretation, and newspaper reading skills. One or more crafts projects were completed by each student. A specially designed series of lessons in social intelligence was incorporated within the social studies phase of instruction.

The third phase of instruction provided recreational activities within a framework which introduced new skills and broadened experience and practice with familiar recreational activities. Swimming instruction was provided daily during forty-five minutes of this phase. A variety of outdoor or gym sports was offered during the other part of the time block.

The fourth phase of the instructional day alternated classes in health and music. Activities in health were designed to provide a variety of pertinent content that would expand the student's knowledge of facts and allow him to practice health habits for daily living. Topics of study included personal body care, family health, sex education, disease and community facilities aiding health.

During music instruction students were introduced to various types of music. Participation in singing and playing song flutes occupied a major portion of this phase of the day. All instruments of the orchestra were examined, and there were many opportunities for the students to play on autoharps and song bells.

Strengths of the Instructional Program

Emphasis is given here to the strengths of the four-phase instructional program in order to present those elements which might be used to guide those who wish to develop innovations in the instruction provided within the school systems. There should be no implication drawn that there were no weaknesses in this program; weaknesses noted during the 1967 Operation Pebble seemed to offer little of value in pursuit of this purpose.

The list which follows includes those strengths which were considered most pertinent for consideration.

1. The pupil-teacher ratio of each phase of the instructional program was considerably more desirable than that of the usual school situation.

2. Of great value was the adequate appropriation of funds for realistically achieving instructional purposes.

3. Attainable goals were planned. Specific objectives for developing skills, knowledge and attitudes were developed for the students participating in Operation Pebble. The weakness of incorporating too many goals within the instructional program was faced realistically. The

scope of each instructional phase was adjusted to facilitate a great degree of mastery of carefully selected learnings.

4. The 105-minute instructional period allowed sufficient time for many student-centered activities which are best performed within a continuous time period: the purpose-setting and follow-up sessions used in conjunction with field trips, as an example.

5. For four hours of daily instruction, two or more hours of daily instructor preparation was allotted. Instructors also spent several hours weekly in out-of-class contacts with students.

6. The out-of-class contacts made with students proved to be invaluable in developing a favorable attitude toward learning on the part of the students. Teachers arrived fifteen to twenty minutes before the scheduled time for class to begin in order to have more individual contact with students. Evening and Sunday associations among teachers and students effected similar results.

7. There were co-operative efforts of all the staff (directors, counselors, and teachers) toward furthering mutual objectives.

8. Supervisors and teacher-aides were available for assistance in providing adequately for the needs of teachers as they worked with the students. Each teacher had the assistance of an aide during one-half day, or more when required. Three instructional supervisors, two who also worked as instructors of students and one who had no instructional duties, were employed to work with the staff of fifteen instructors. The activities of this staff were centered around the needs of the students as diagnosed by their instructors.

9. The sincere concern of all staff members for the welfare and progress of each student stimulated achievement.

10. Teacher acceptance of the attitudes and behavior of the students, rather than a general attitude of condemnation and disapproval, produced respect and more positive response among students toward learning.

11. Discipline was based on carefully-planned prevention of problems; a reasoning, positive approach was used with each problem which did occur.

12. The members of the staff were adaptable to the extent that the overall needs of each phase of instruction, counseling and research were met with a minimum of disruption.

13. Instructors in each phase were continuously involved in evaluating all aspects of their instruction. Every possible effort was made to remedy immediately each weakness or hindrance to effective achievement. Remediation of deficiencies in instructional effectiveness was sought daily.

14. Information concerning each student was accumulated to help each instructor in his guidance of that individual. This supply of information was forwarded in a folder to the school which each student attends.

15. The use of available resources of the university--materials, facilities and personnel--is of great value to the success of this program. The leaders who initiated the Pebble program and the personnel of the Office of Economic Opportunity are the strength which made possible the success claimed by this year's Operation Pebble.

Most Noticeable Student Deficiencies

The instructional staff of Operation Pebble endeavored to identify several of the most pronounced deficiencies occurring among the students who have participated in this program. These deficiencies may identify for educators some needs that can be remedied. It is evident that the environment from which these students come has allowed these deficiencies to develop. A major purpose of Operation Pebble has been that of identifying student needs along with the development of effective methods for their remediation. This section, and the following, attempt to report these findings.

Skill Deficiencies

1. Inability to derive meanings from commonly used symbols: map symbols, figurative language, graph interpretation, punctuation marks, dictionary diacritical markings

2. Ineffective communication skills: oral--for role playing, for panel discussion, for effective conversation with peers or adults... written--for constructing a series of correctly spelled, complete sentences for developing a short paragraph about a familiar topic

3. Undeveloped skills of working effectively with others toward mutual goals

4. Inability to use word attack methods known to most average fifth grade readers: phonetic analysis; use of context clues; use of picture clues; use of root words, prefixes and suffixes; syllabication

5. Reading speed generally below average expected for those

beginning sixth grade

6. Little proficiency in manipulative skills for crafts or operation of machinery

7. Very poor oral interpretation of easy reading material

8. Poor enunciation practices to the extent that difficulty was encountered in reading: as the written form, "What is your name?" would not be interpreted from their oral version, "Wa cher name?"

9. Less than average ability to follow directions, both oral and written

10. Lack of proficiency in use of the dictionary

11. Below average mastery of skills necessary for physical fitness according to norms established by AAHPER

12. Less than desirable skill in application of known facts in constructive daily situations: health knowledge already acquired was not used, as an example

Attitudes Contributing to Deficiencies

1. Lack of adequate self-confidence

2. An indifferent attitude toward learning which seemed to be one that had gained group approval

3. Definite lack of interest in reading for pleasure

4. Little pride in personal appearance

5. Tendency to set goals below one's capabilities

6. Lack of ambition: a satisfied complacency about existing circumstances, many of which could and should be remedied rather easily

7. Lack of respect for the property of others, personal and public

Knowledge Deficiencies

1. Inadequate background of facts necessary for proper hygiene
2. Poor concept of the value of education other than for economic gain
3. Very limited acquaintance with the world, the nation, and the community resulting from a limited range of experiences
4. Lack of familiarity with reference material used by the junior high school student
5. Small vocabulary
6. Lack of awareness of the offensive nature of some profane words in their vocabularies
7. Limited knowledge of social procedure and manners that are helpful in wholesome family or community living
8. Very limited awareness within the individual of his own potentialities and capabilities along with a limited awareness of how to capitalize on personal strengths

Instructional Activities for Remediation of Deficiencies

Within the scope of the four-phase instructional program a broad range of class activity has been used. From a thorough evaluation of the results of each of these, the instructional staff has formed some pertinent conclusions as to those of greatest worth and those of little value.

The criteria for evaluation was based on student response and evident changes in pupil behavior. A testing and grading system, such as that used in public school, was included in only one instance: those reading classes which read from the Controlled Reader used a comprehension check that gave a percentage number for correct responses.

Rather than providing each class with a prescribed "course of study," the instructor explored the capabilities and proficiencies of students in his area of instruction. As group and individual needs were identified, specific class or individual remediation was planned.

There were several types of activities which seemed most effective in bringing about the desired learnings. Many instructors felt that the first-hand experiences of field trips were the most valuable remedial activities provided. These field trips supplied the basis for expanding learnings, vocabulary and social skills. Planning with the students before these trips and using follow-up activities provided new concepts and vocabulary. An effective pre-trip technique was that of group discussion aimed toward the identification of learnings to be discovered. Definite behavior improvements occurred when group standards were established before the trip. It seemed that students of Operation Pebble soon developed a feeling of belonging to the program, and within most individuals there was a desire to help other group members, a desire for the group to grow in self-respect and to obtain a favorable reaction from outsiders. Just as soap, water, and clean, new clothes (along with encouragement to use these) had effected a personal pride, the opportunity to belong to a group which set acceptable standards brought about an

individual desire to contribute to the welfare of the group.

In every pursuit of the instructional program ample opportunity was provided for the student to experience successful completion of meaningful tasks. Individual activities were adjusted to the capabilities of the individual. The student was made aware of what was to be accomplished, and a plan for achieving the identified goal was developed with him. Books, workbook material, and teacher-prepared worksheets were carefully selected or prepared to permit students to work at a level that would allow completion without defeating frustrations.

Many activities were used in which the students used a multi-sensory approach to learning. As a part of reading instruction, words were written, spoken, and heard. Tape recordings of individual student readings were very effective in developing reading skills. The sense of touch was used as an additional approach for those with severe reading disabilities. Many teacher-developed games were used for practice in word recognition. Other instructional phases used similar multi-sensory experiences.

The use of game-type learning situations proved to be one of the most effective techniques for motivation of these students. The boys and girls of Operation Pebble desired competition among individuals and teams.

The designed variety of activities for every phase of instruction provided an effectual means for stimulating learning. The section entitled "Time Structure," which was included in Operation Pebble: A Second Year Report, outlines the daily design for variety in activity.

Also several different techniques were used to pursue a goal through various approaches. The effectiveness of many commercial teaching aids was augmented by thoughtful teacher-selection and a discriminating approach in their use.

Many of the students responded positively to the use of informal dramatizations and role playing situations. By identifying with a story or dramatic character or by assuming a role in an imaginary situation, the boys and girls developed a variety of skills, learned facts and explored concepts.

In each instructional phase the need for development of oral communication skills was met by structuring situations in which the students had opportunities to discuss within small groups the facets of the area being studied. The use of facts, vocabulary, and concepts in oral ways preceded any efforts in written use by these boys and girls. Planning, structuring and conducting sessions of this type required a great deal of pre-planning on the part of each instructor. There is evidence in the instructional experience of Operation Pebble that these oral sessions provided the basis for developing more effective communication in writing.

Response by the students to the participatory music was enthusiastic. Although not all students could or would sing well enough to feel satisfied and happy, the opportunity to play on an instrument was one that gave pleasure to all. The use of the inexpensive song flutes and participation with autoharps and song bells developed interest in music as performed by the students which led to greater interest in music as performed by others.

As might be expected with boys and girls of less than average achievement, very little pupil growth seemed to occur as the result of a teacher lecture of over five or ten minute's duration. On occasion several instructors found that inadequate time spent in goal identification with students caused less than the desired amount of learning. For the 1967 session a very short time period elapsed between the notification of availability of funds for Operation Pebble and the beginning of work with the students. This caused some inconvenience in that desired materials were unavailable or were late in arriving for use.

Implications for the Public Schools

Probably the most significant implication for the schools which work regularly with many culturally deprived rural youth is that action programs are an urgent necessity. Several programs are already in operation. The findings of the three-year study of procedures used within the framework of Operation Pebble indicate several specific features which the action programs of this area should include. These features are not new. Their presence has long been recognized. The remedies herein suggested have been sought by many during the past few years. Operation Pebble has produced evidence as to the value of certain remedial actions which might receive priority among the steps to be taken in the future.

The suggestions given below are those most urgently needed:

1. A lowered pupil-teacher ratio, particularly in the area of reading instruction.

2. A continuation of instruction in reading skills throughout the school years.

3. The inclusion of many first-hand experiences around which learnings may be centered.

4. Provision of reference and text materials which are geared to the reading level of the reader.

5. During at least a part of the school day a longer, continuous period for learning than the customary fifty-minute class period of the departmentalized situation typical of the schools from which these students come.

6. Provision of participatory music and physical education for each student as a part of every school day.

7. Adequate provision for the development of social skills which lead to responsible, satisfying family and community living.

8. The addition of personnel to aid instructors in their task of remediation of student deficiencies: both an experienced, well-trained supervisory staff and an efficient team of teacher-aides.

College of Education